

GPM140 GLOBAL PERFORMANCE SWITCHERS



SPECIFICATIONS:

AC Input

85-264Vac, 47-63Hz single phase.

Input Current

Maximum input current at 120Vac, 60Hz with full rated output load: 3.7A

Hold-Up Time

20mSec minimum from loss of AC input at full load, nominal line (115Vac).

Output Power

140W convection, 160W with 26cfm moving air. Peak ratings are for 60 sec. maximum duration, 10% duty cycle.

Overload Protection

Fully protected against short circuit and output overload. Short circuit protection is cycling type power limit. See output ratings chart for additional notes or conditions.

Overvoltage Protection

Main outputs: 124% \pm 12%

Efficiency

65% at full rated load, nominal input voltage, depending on model and load distribution.

Turn-on Time

Less than 1 second at 120Vac, 25°C (inversely proportional to input voltage and thermistor temperature).

Input Protection

Internal AC fuse provided. Designed to blow only if a catastrophic failure occurs in the unit.

Inrush Current

Inrush is limited by internal thermistors. Inrush at 240Vac under cold start conditions will not exceed 60A.

Temperature Coefficient

0.03%/°C typical on all outputs.

Environmental

Designed for 0 to 50°C operation at full rated output power; derate output current and total output power by 2.5% per °C above 50°C. See Environmental and Packaging Specifications (p. 11) for additional information.

Power Fail

TTL- or CMOS-compatible output goes low (< 0.5V) 5mSec before output voltage drops more than 4% below nominal voltage upon loss of AC power. The signal is factory set to trip on 84 to 94Vac brown-out depending upon incoming line impedance and distortion. Other settings are available to the user through adjustment of built-in potentiometer (consult factory for assistance).

No-Load Turn-on/Standby

No degradation of reliability will occur.

FEATURES:

- Wide-range AC input 85-264Vac
- 2-year warranty
- Approved to UL2601-1, IEC601-1 and CSA22.2 No. 601
- Exceeds FCC and VDE/CISPR11 Class B/IEC601-1-2
- For commercial version, see p. 28
- **CE** marked to LVD

Output Noise

0.5% RMS, 1% Pk-Pk, 20MHz bandwidth, differential mode. Measured with noise probe directly across output terminals of the power supply.

Transient Response

Main output—500 μ Sec typical response time for return to within 0.5% of final value for a 50% load step change. $\Delta I/\Delta t < 0.2A/\mu$ Sec. Maximum voltage deviation is 3.5%. Startup/shutdown overshoot less than 3%.

Remote Sense

Provided as a standard feature on single-output models.

Voltage Adjustment

Built-in potentiometer adjusts voltage \pm 5%.

Reverse Voltage Protection

All outputs protected against inadvertent application of reverse voltage up to 1 times rated current of the reverse output.

Overload Protection

Factory set to begin power limiting at approximately 175W.

EMI/EMC Compliance

All models include built-in EMI filtering to meet the following emissions requirements:

EMI SPECIFICATIONS	COMPLIANCE LEVEL
Conducted Emissions	EN55011 Class B; FCC Class B
Static Discharge	EN61000-4-2, 6 kV contact, 8 kV air
RF Field Susceptibility	EN61000-4-3, 3 V/meter
Fast Transients/Bursts	EN61000-4-4, 2 kV, 5 kHz
Surge Susceptibility	EN61000-4-5, 1 kV diff., 2 kV com.

Leakage Current

60 μ A. 254Vac @ 60Hz input.

Safety

Approved to UL2601, CSA22.2 No. 601 Level 3 and IEC601. UL file E116994; CSA #LR46516. The output(s) are intended for safety earthed Signal Output and Intermediate Circuits only. The output(s) are not acceptable for patient connection without additional isolation. All DC outputs are SELV under normal and single fault conditions.

Model	Output	Output Minimum	Output Maximum (B)	Output Maximum (C)	Peak	Noise P-P	Total Regulation (A)
GPM140-5	5V	0A	26A	30A	32A	50mV	2%
GPM140-12	12V	0A	11.7A	13.4A	14.6A	120mV	2%
GPM140-15	15V	0A	9.3A	10.7A	11.7A	150mV	2%
GPM140-24	24V	0A	5.8A	6.7A	7.3A	240mV	2%
GPM140-28	28V	0A	5A	5.7A	6.3A	280mV	2%

A. Total regulation is defined as the maximum deviation from the nominal voltage for all steady-state conditions of initial voltage setting, input line voltage and output load.
 B. Unrestricted natural convection cooling.
 C. Requires 26cfm moving air.

GPM140 MECHANICAL SPECIFICATIONS:

INPUT: J1: AMP P.C.B. HEADER P/N 640445-5

PIN 1) AC LINE PIN 4) N/C
 PIN 2) N/C PIN 5) AC GROUND
 PIN 3) AC NEUTRAL

MATING CONNECTOR AMP P/N: HOUSING 640250-5
 CONTACTS 770522-1

TB1: 0.375 X 6-32 TERMINAL BLOCK

PIN 1) AC LINE
 PIN 2) AC NEUTRAL
 PIN 3) AC GROUND

SIGNALS: J2 AMP PCB HEADER P/N 640456-4

PIN 1) POWER FAIL
 PIN 2) - SENSE
 PIN 3) + SENSE
 PIN 4) N/C

MATING CONNECTOR AMP P/N 640440-4

OUTPUT: J3 AMP P.C.B. HEADER P/N 1-640445-6

PIN 1) + Vout PIN 9) COMMON
 PIN 2) + Vout PIN 10) COMMON
 PIN 3) + Vout PIN 11) COMMON
 PIN 4) + Vout PIN 12) COMMON
 PIN 5) COMMON PIN 13) + Vout
 PIN 6) COMMON PIN 14) + Vout
 PIN 7) COMMON PIN 15) + Vout
 PIN 8) COMMON PIN 16) + Vout

MATING CONNECTOR AMP P/N: HOUSING 1-640250-6
 CONTACTS 770522-1

NOTE: 5A MAX. RECOMMENDED CURRENT PER CONNECTOR PIN

TB2: 0.375 X 6-32 TERMINAL BLOCK

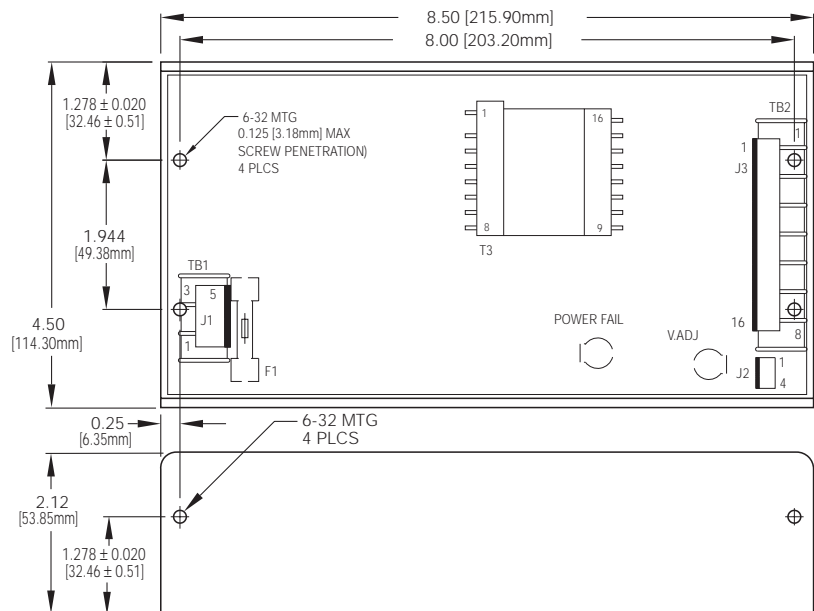
PIN 1) + Vout PIN 5) COMMON
 PIN 2) + Vout PIN 6) COMMON
 PIN 3) COMMON PIN 7) + Vout
 PIN 4) COMMON PIN 8) + Vout

OPTIONAL COVER AVAILABLE, ORDER P/N 08-30466-1140

OPTION: ADD "-T" SUFFIX TO PART NUMBER FOR
 6-32 SCREW TERMINAL BLOCK ON I/O

WEIGHT: 3.0 LBS MAX. [1.36 kg MAX.]

TOLERANCES: X.XX=0.030 [0.76mm]
 X.XXX=0.010 [0.25mm]



MEDICAL GLOBAL PERFORMANCE SWITCHERS